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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/681,287 | 10/09/2003 | Krishna Balachandran | 29250-001082/US | 9239 |

7590 12/23/2005
HARNESSE, DICKEY & PIERCE, P.L.C.
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Reston, VA 20195

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| EXAMINER |
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LAM, DUNG LE

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| ART UNIT | PAPER NUMBER |
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2687

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/681,287 | BALACHANDRAN ET AL. | |
| | Examiner | Art Unit | |
| | Dung Lam | 2687 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Information Disclosure Statement

1. The Information Disclosure Statement submitted on 5/4/05 has been considered by the examiner (see attached PTO-1449 form).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims **1-4** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements. See MPEP § 2172.01. Although the preamble of claim 1 is claiming a method of triggering registration, the actual step of triggering the registration is not cited in the body of the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims **1-13** are rejected under 35 U.S.C. 102(a) as being anticipated by SWG23 BCMCS ADHOC: "Signaling Support for 1x BCMCS", 28 August 2003, pages 1-53 (simply referred to as "**3G-1x-BCMCS**").

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5. Regarding **claim 1**, **3G-1x-BCMCS** teaches a method of triggering registration of a mobile station in a network supporting broadcast multicast services (p.18, 19, 26, 28, 30) comprising:

generating a registration message based on a change in frequency, from a first frequency to a second frequency (p. 26, lines 8 – 10 & lines 35 – 39, p. 28 lines 16-22 & p. 30 lines 27 & 31-35) that is monitored by the mobile station (section 2.6.2.9.3, p. 20 lines 4-14), if the second frequency is not known to the network based on flow identifier (BCMCS_FLOW_ID) information previously registered by the mobile station with the network (p. 19 lines 21-29; p. 26 lines 8 – 10 & lines 35 - 39).

6. Regarding **claim 5**, **3G-1x-BCMCS** teaches a method of paging a mobile station comprising paging a mobile station on a given frequency based on a registration message received from the mobile station indicating the mobile station's presence on that given frequency (p. 20 lines 4-9).

7. Regarding **claim 10**, **3G-1x-BCMCS** teaches a method of determining a frequency of broadcast multicast content being monitored by a mobile station at a network (p. 20 lines 8-9), comprising: generating, at the mobile station, a registration message based on a change in frequency monitored by the mobile station that is not known to the network based on flow identifier information previously registered by the mobile station with the network (p. 20 lines 4-8); and determining an updated frequency being monitored by the mobile station from the generated registration message (p. 20 lines 8-9).

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8. Regarding **claims 2, 7, and 11**, **3G-1x-BCMCS** teaches a method wherein the flow identifier information is a broadcast-multicast service flow ID (p. 3 line 7) that the mobile station had inherently previously registered with the network (p. 26, lines 8 – 10 & lines 35 - 39).

9. Regarding **claims 3 and 8**, **3G-1x-BCMCS** teaches that the first or second frequency monitored by the mobile station is a frequency of broadcast multicast content being received by the mobile station (p. 19 lines 21-29).

10. Regarding **claim 4, 9 and 13**, **BCMCS** teaches a method, wherein generating a registration message includes the mobile station:

changing from the first frequency to the second frequency (p. 19 lines 21-29);

determining whether presence of the mobile station's monitoring of the second frequency is known to the network, based on a broadcast-multicast service flow identifier that the mobile station previously registered with the network (p. 19 lines 5-7);

and transmitting a registration message to the network, if the second frequency does not correspond to a known frequency based on the broadcast-multicast service flow identifier (p. 19 lines 21-29).

11. Regarding **claim 6**, **3G-1x-BCMCS** teaches a method of claim 5, wherein said registration message is generated based on a change in frequency, from a first frequency to a second frequency, that is monitored by the mobile station, if the second frequency is not known to the network based on flow identifier information previously registered by the mobile station with the network (see claim 1 above).

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12. Regarding **claim 12**, **3G-1x-BCMCS** teaches a method of claim 10, wherein the frequency monitored by the mobile station is contained in the registration message (p. 28 lines 16-22).

13. Claims **1, 5 and 10** are rejected under 35 U.S.C. 102(a) as being anticipated by **QUALCOMM** ("1x-BCMCS - Registration for Paging" 3GPP2 Adhoc, September 15 2003, pages 1-6)

14. Regarding **claim 1**, **Qualcomm** teaches a method of triggering registration of a mobile station in a network supporting broadcast multicast services comprising (page 1-6) generating a registration message based on a change in frequency (item 2a-b p. 3; from a first frequency to a second frequency (item 2a-b, p.4), that is monitored by the mobile station (item 2a p.4), if the second frequency is not known to the network based on flow identifier (item 2 p. 4) information previously registered by the mobile station with the network.

15. Regarding **claim 5**, **Qualcomm** teaches a method of paging a mobile station comprising: paging a mobile station on a given frequency based on a registration message received from the mobile station indicating the mobile station's presence on that given frequency (p. 4 item 4, p. 2 item 2).

16. Regarding **claim 10**, **Qualcomm** teaches a method of determining a frequency of broadcast multicast content being monitored by a mobile station at a network (p. 4, item 4), comprising: generating, at the mobile station (item 2a p.4), a registration message

based on a change in frequency monitored by the mobile station that is not known to the network based on flow identifier information previously registered by the mobile station with the network; and determining an updated frequency being monitored by the mobile station from the generated registration message (item 2a p.4).

Claim Rejections - 35 USC § 102

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claims **1, 5 and 10** are rejected under 35 U.S.C. 102(e) as being anticipated by

Sinnaraja (US Pub No. 2003/0114177).

18. Regarding **claim 1**, **Sinnaraja** teaches a method of triggering registration of a mobile station in a network supporting broadcast multicast services, comprising generating a registration message based on a change in frequency, from a first frequency to a second frequency, that is monitored by the mobile station, if the second frequency is not known to the network based on flow identifier information previously registered by the mobile station with the network (para. 62-63, 82).

19. Regarding **claim 5**, **Sinnaraja** teaches a method of paging a mobile station comprising paging a mobile station on a given frequency based on a registration message received from the mobile station indicating the mobile station's presence on that given frequency (para. 59, 79 and 81).

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20. Regarding **claim 10**, **Sinnaraja** teaches a method of determining a frequency of broadcast multicast content being monitored by a mobile station at a network, comprising: generating, at the mobile station, a registration message based on a change in frequency monitored by the mobile station that is not known to the network based on flow identifier information previously registered by the mobile station with the network (para. 62 and 63); and determining an updated frequency being monitored by the mobile station from the generated registration message (para. 59) .

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Lam whose telephone number is (571) 272-6497. The examiner can normally be reached on M - F 9 - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dung Lam

12/6/2005


ELISEO RAMOS-FELICIANO
PATENT EXAMINER